[4910-13-P]

#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2018-0739; Product Identifier 2015-NE-07-AD]

RIN 2120-AA64

Airworthiness Directives; Pratt & Whitney Canada Corp. Turboshaft Engines

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

and 11.45, by any of the following methods:

SUMMARY: We propose to supersede airworthiness directive (AD) 2015-20-04, which applies to certain Pratt & Whitney Canada Corp. (P&WC) PT6B-37A turboshaft engines. AD 2015-20-04 requires initial and repetitive inspections until replacement of the No. 10 bearing, and eventual replacement of the No. 9 bearing, both located in the engine reduction gearbox (RGB) assembly. Since we issued AD 2015-20-04, P&WC has determined that the repetitive inspection of the bearings has an associated risk of gearbox damage or contamination and that the bearing installation required by AD 2015-20-04 does not adequately address the issue of bearing axial movement. This proposed AD would require removal from service and replacement of the No. 9 and No. 10 position bearings. We are proposing this AD to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
  - Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Pratt & Whitney Canada Corp., 1000 Marie-Victorin, Longueuil, Quebec, Canada, J4G 1A1; phone: 800-268-8000; fax: 450-647-2888; website: http://www.pwc.ca. You may view this service information at the FAA, Engine & Propeller Standards Branch, 1200 District Avenue, Burlington, MA, 01803. For information on the availability of this material at the FAA, call 781-238-7759.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0739; or in person at the Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the mandatory continuing airworthiness information, regulatory evaluation, any comments received, and other information. The street address for Docket Operations (phone: 800-647-5527) is listed above. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Barbara Caufield, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone: 781-238-7146; fax: 781-238-7199; email: barbara.caufield@faa.gov.

#### SUPPLEMENTARY INFORMATION:

#### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2018-0739; Product Identifier 2015-NE-07-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM because of those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

#### **Discussion**

We issued AD 2015-20-04, Amendment 39-18282 (80 FR 61717, October 14, 2015), ("AD 2015-20-04"), for certain P&WC PT6B-37A turboshaft engines. AD 2015-20-04 requires initial and repetitive inspections until replacement of the No. 10 bearing, and eventual replacement of the No. 9 bearing, both located in the engine RGB assembly. AD 2015-20-04 resulted from reports of incorrect engine torque for PT6B-37A engines. We issued AD 2015-20-04 to prevent axial movement at the No. 10 bearing position in

the engine RGB assembly, which could result in engine overtorque, failure of the engine, in-flight shutdown, and loss of the helicopter.

#### Actions Since AD 2015-20-04 Was Issued

Since we issued AD 2015-20-04, P&WC has determined that the repetitive inspection of the bearings in P&WC Service Bulletin (SB) PT6B-72-39095, Revision No. 3, dated December 29, 2014, has an associated risk of gearbox damage or contamination. P&WC also determined that the bearing installation in P&WC SB No. PT6B-72-39092, Revision No. 4, dated December 29, 2014, as required by AD 2015-20-04, does not adequately address the issue of bearing axial movement.

#### Related Service Information under 1 CFR Part 51

We reviewed P&WC SB No. PT6B-72-39108, dated September 30, 2016. The SB describes procedures for replacing affected bearings. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

#### **Other Related Service Information**

We reviewed P&WC SB No. PT6B-72-39092, Revision No. 4, dated December 29, 2014. The service information describes procedures for removing affected bearings.

#### FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

# **Proposed AD Requirements**

This proposed AD would retain none of the requirements of AD 2015-20-04. This proposed AD would introduce a new bearing configuration that addresses the axial movement at the No. 9 and No. 10 bearing positions and remove the repetitive inspection requirements of AD 2015-20-04. This proposed AD would also remove the previously mandated bearing configuration in P&WC SB No. PT6B-72-39092, Revision No. 4, dated December 29, 2014.

## **Costs of Compliance**

We estimate that this proposed AD affects 119 engines installed on helicopters of U.S. registry.

We estimate the following costs to comply with this proposed AD:

### **Estimated costs**

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Remove and replace No. 9 and No. 10 bearings	65 work-hours X \$85 per hour = \$5,525	\$37,874	\$43,399	\$5,164,481

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII,
Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress
charges the FAA with promoting safe flight of civil aircraft in air commerce by
prescribing regulations for practices, methods, and procedures the Administrator finds
necessary for safety in air commerce. This regulation is within the scope of that authority
because it addresses an unsafe condition that is likely to exist or develop on products
identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to engines, propellers, and associated appliances to the Manager, Engine and Propeller Standards Branch, Policy and Innovation Division.

## **Regulatory Findings**

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

(1) Is not a "significant regulatory action" under Executive Order 12866,

- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
  - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

# List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

## § 39.13 [Amended]

2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2015-20-04, Amendment 39-18282 (80 FR 61717, October 14, 2015), ("AD 2015-20-04"), and adding the following new AD:

**Pratt & Whitney Canada Corp.**: Docket No. FAA-2018-0739; Product Identifier 2015-NE-07-AD.

## (a) Comments Due Date

The FAA must receive comments on this AD action by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

# (b) Affected ADs

This AD replaces AD 2015-20-04, Amendment 39-18282 (80 FR 61717, October 14, 2015).

### (c) Applicability

This AD applies to Pratt & Whitney Canada Corp. (P&WC) PT6B-37A turboshaft engines with serial number (S/N) PCE-PU0275 or earlier or with engine S/N PCE-PU0278.

# (d) Subject

Joint Aircraft System Component (JASC) Code 7210, Turbine Engine Reduction Gear.

#### (e) Unsafe Condition

This AD was prompted by reports of incorrect engine torque for PT6B-37A turboshaft engines. We are issuing this AD to prevent axial movement at the No. 10 bearing position in the engine reduction gearbox (RGB) assembly. The unsafe condition, if not addressed, could result in engine overtorque, failure of the engine, in-flight shutdown, and loss of the helicopter.

# (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

## (g) Required Actions

(1) For affected engines that did not have the bearings replaced in accordance with P&WC Service Bulletin (SB) No. PT6B-72-39092, Revision No. 4, dated December 29, 2014, or earlier revision:

- (i) Remove from service and replace the No. 9 and No. 10 position bearings at the next engine shop visit after the effective date of this AD, but no later than December 31, 2020, whichever occurs first, in accordance with the Accomplishment Instructions, paragraphs 3.A. and B., of P&WC SB PT6B-72-39108, dated September 30, 2016.
  - (ii) Reserved.
- (2) For affected engines that had the bearings replaced in accordance with P&WC SB No. PT6B-72-39092, Revision No. 4, dated December 29, 2014, or earlier revision:
- (i) Remove from service and replace the No. 9 and No. 10 position bearings before December 31, 2020, in accordance with the Accomplishment Instructions, paragraphs 3.A. and B., of P&WC SB PT6B-72-39108, dated September 30, 2016.
  - (ii) Reserved.

#### (h) Definition

For the purpose of this AD, an "engine shop visit" is the induction of an engine into the shop for maintenance involving the separation of pairs of major mating engine flanges, or any removal of the RGB assembly.

## (i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j)(1) of this AD. You may email your request to: ANE-AD-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal

inspector, or lacking a principal inspector, the manager of the local flight standards

district office/certificate holding district office.

(j) Related Information

(1) For more information about this AD, contact Barbara Caufield, Aerospace

Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone:

781-238-7146; fax: 781-238-7199; email: barbara.caufield@faa.gov.

(2) Refer to Transport Canada AD CF-2015-01R1, dated November 18, 2016, for

more information. You may examine the Transport Canada AD in the AD docket on the

Internet at http://www.regulations.gov by searching for and locating it in Docket No.

FAA-2018-0739.

(3) For service information identified in this AD, contact Pratt & Whitney Canada

Corp., 1000 Marie-Victorin, Longueuil, Quebec, Canada, J4G 1A1; phone: 800-268-

8000; fax: 450-647-2888; website: http://www.pwc.ca. You may view this service

information at the FAA, Engine & Propeller Standards Branch, 1200 District Avenue,

Burlington, MA, 01803. For information on the availability of this material at the FAA,

call 781-238-7759.

Issued in Burlington, Massachusetts, on September 7, 2018.

Robert J. Ganley,

Manager, Engine & Propeller Standards Branch,

Aircraft Certification Service.

[FR Doc. 2018-19862 Filed: 9/14/2018 8:45 am; Publication Date: 9/17/2018]

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